ANNALS OF NATURAL HISTORY.

X.—Observations on the Fur Seal of Commerce. By R. Hamilton, Esq., F.R.S.E., M.W.S., &c.

[With a Plate.]

IN soliciting attention to the Fur Seal of Commerce, we need scarcely remark that it claims regard in a commercial as well as in a scientific point of view. With the existence of the seal trade of the northern regions we have for centuries been familiar; but this trade must yield both in extent and importance to that which more recently has been prosecuted in the southern hemisphere. The fur seal has not indeed formed the sole object of the southern trade, some of its congeners being of equal or even greater importance; more especially the proboscis seal of Peron, which, from its magnitude, not less than its nasal appendage, well merits its appellation of the sea elephant. This species attains the dimensions of 20, 25, and even 30 feet in length, with an unwonted proportional bulk, thus equalling in dimensions half the size of the great Greenland Whale; and the oil obtained from it is of very superior quality. Next however in importance to this giant of the group unquestionably comes the fur seal, which has yielded its thousands and tens of thousands sterling to the adventurous trader.

This is not the place to dwell upon the origin or to trace the history of the South Sea seal trade, but a few notices may not be unacceptable. Soon after Captain Cook's voyage in the Resolution in 1771, he presented an official report concerning New Georgia, in which he gave an account of the great number of proboscis seals and fur seals which he had encountered on the shores of that island. The information speedily tempted several enterprising merchants to fit out vessels for the capture of these animals. With regard to the oil obtained from the former, it has been stated, on most respectable authority, that during a period of about fifty years, not less than 20,000

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tons were annually procured from this spot alone for the London market, which at a very moderate price, say 50l. per ton, would yield about 1,000,000% per annum. With regard again to the fur seal, from the same island, the English and others, chiefly the Americans, have procured a number of skins which cannot be estimated at less than 1,200,000. From the island of Desolation also, which Capt. Cook first made known, the number has scarcely been smaller nor the profit less; and finally, with regard to South Shetland, the number taken off by vessels of different nations, during the two years 1821 and 1822 alone, was not less than 320,000. The value of these skins of course varies with the state of the market; but it is in relation to them, it has been stated in the current edition of the Encyclopædia Britannica, that "from about the year 1806 till 1823 an extensive trade was carried on in the South Seas in procuring seal skins, which in that part of the world are covered with a fine fur. They were obtained," it is added, "in vast abundance by the first traders, and yielded a very large profit. Cargoes of these skins yielded five and six dollars a piece in China, and the present price in the English market averages from thirty to fifty shillings *."

With regard to the fur seal trade alone several thousand tons of shipping have annually been employed; and respecting the seal trade generally, it has recently been stated that the English and Americans, who together nearly engross the whole, employ not fewer than sixty vessels of from 250 to 300 tons burden!.

It must be regarded as not a little singular, and yet we believe it is not more singular than true, that this animal, which has been the object of such extensive and profitable pursuit, has not hitherto been described by the scientific naturalist; so that were any one to turn to works of science, he would not only be unable to ascertain the characters of the fur seal, but would even be at a loss to discover whether in the long catalogue of the *Phocæ* which has been accumulated, the fur seal has obtained a place. At several distant æras of the science, indeed, a few indistinct notices of this species of seal may

^{*} Vol. x. p. 264. † Voy. towards the South Pole. Lond. 1825, p. 54. ‡ Lesson, Dict. Class. des Sc. Nat.

perhaps be found, under the names of longicollis and Falk-landica; and these it may be interesting to consider in the sequel. But with these exceptions, which are truly more apparent than real, it will be found that so far as the records of the science are concerned, this animal has hitherto been neither recognised nor described.

It is the object of the following pages to supply these deficiencies; not indeed with all the accuracy we could wish, but so far as our opportunities permit. We shall first, however, premise a word or two respecting the *furs* of seals.

A slight examination of the recent skins speedily exhibits that two substances sufficiently distinct go to form the coat or robe of most seals, as well as of many other animals. These are hair, so well known on our own persons, and on most quadrupeds, and a soft woolly down or fur, which usually lies at the root of the hair, close to the skin, and which is penetrated and covered by the hair. The hair of the different species of seals is in very various quantities and of very different qualities; as is also the fur, positively and relatively. Sometimes the hair is exceedingly coarse and meagre, and accompanied with little or no down, so as to be of no more value to the furrier than the hide of the horse or ox. In other instances the hair is copious, soft, long, and silky, so that even without down, and still more with it, it is highly esteemed as a fur skin, and is used like those of the fox or sable; and once more, there are certain species in which the relative quantity and quality of the hair is so inferior to that of the fur, that the former is disregarded, and is wholly removed, so that nothing is left but the soft woolly down. Of this last description is the fur seal skin of commerce. We need scarcely add, that the skins of a great variety of seals are very extensively used both by rude and refined nations. They are employed by the former especially, as leather is with us, as articles of dress and for domestic purposes, both raw and tanned, and sometimes made water-proof. They are also used in their natural state, the fur being retained; and in this condition some of them are compared to velvet: they are in this way extensively employed by savage tribes, and also throughout Russia and Asia, and more sparingly among ourselves. But

thirdly, the proper seal fur of commerce is formed of skins from which the hair is removed by art, leaving the under exquisitely soft and downy covering, which forms an article highly prized by all nations.

In the absence of scientific information respecting the animal yielding this fur, we must turn to our navigators and seal hunters; and we find that one of the earliest intimations is that already alluded to in Capt. Cook's memorial, which in all probability had reference to this seal. Another early notice concerning this animal is from the pen of Lieut. Clayton, who in the year 1773-4 commanded the English settlement in Saunders Island, one of the Falklands, which he characterizes as a barren, dreary, desolate, boggy, rocky spot. In his paper in the Phil. Trans. 1775, he tells us that four kinds of seals were found there, viz. the common seal, the sea lion, the clapmutch, and the fur seal, which last, he says, has its name from its coat, which is a fine soft fur; and it is also thinner-skinned than any of the others: he adds, that from these isles a valuable fishery might be carried on*. But still more to the point, we have the information derived from the late gallant and enterprising Weddell, who, as is well known, with his little squadron consisting of the Jane of Leith of 160 tons, and the Beaufoy of 65, penetrated in the year 1823 two hundred and fourteen miles nearer the South Pole than the celebrated Cook or any other navigator had previously done. We never heard of this distinguished individual when alive, but happy should we feel could we by any means be the humble instruments of procuring for his services in our own department the meed of praise they really merit. He was a most successful and extensive seal hunter, and engaged in successive voyages with this single object in view; and, judging from his published work+, he was an accomplished and intelligent as well as a successful mariner. He invariably and without hesitation speaks of the fur seal as one and as distinct from all others of the southern hemisphere, which he contradistinguishes as hair seals. He encountered the fur seal in South Georgia, among the South Orkneys, and in much greater

^{*} Phil. Trans., vol. lxvi. p. 102.
† Voyage towards the South Pole. London, 1825.

numbers in the South Shetland islands, which he was the first to discover. He expressly states, "that the species of seal which inhabits the shores of these last-named islands is exclusively the fur seal;" and again he says, "I have mentioned that the only species of seal found in these islands is that possessing the fur:" and he adds, "the circumstance of its possessing a valuable fur has not been noticed in any description of the seal which I have met*." Our researches have probably been somewhat more extended than those of Mr. Weddell, and it will be seen that our remarks are very much in accordance with his observation.

Among several other good offices which this gentleman performed for this department of science, one was his conveying to this country, and depositing in the hands of the eminent keeper of the Museum of the University of Edinburgh, two specimens of the stuffed skins of this animal; and assuredly, judging from what he has done in other cases, he would have done more, had he not imagined that naturalists on this point required no help from him. These two specimens are now in the Museum, preserved in excellent order, and though insufficient satisfactorily to establish all the characters of the animal, yet as supplying the majority of them, we shall present a faithful sketch and a detailed description. The specimens are very nearly alike in every respect; they appear to have been carefully and accurately prepared, and to have been obtained from female animals †. Judging from the specimens, this seal upon the whole is long and slender ‡, having much the shape of a double cone, largest at the middle and tapering at both extremities. The head is broad and rather flat; the external ear is black, narrow, and pointed. The fore paws are precisely in the middle of the animal; their shape is pyramidal, and in addition to the fore paw, properly so called, there is a strong projecting membrane running from the tip along the posterior margin to the base; they have no vestige of nails.

^{*} Loc. cit. p. 137, 141-2.

[†] For the accompanying very beautiful drawing I am indebted to the kindness and skill of Mr. Stewart, so well known for his faithful and elegant sketches of animated nature, and we have no doubt that an acquaintance with this drawing alone would enable any one at once to recognise the animal.

1 I would here observe that in noting the characters I have had the valuable assistance of my friend Mr. William Jameson.

The hind flippers are rhomboidal in their shape, and consist of the fleshy portion, and a membranous addition, which at its termination is divided into five strap-like processes; there are nails on all the toes but the great one, those of the three middle toes being much the largest and quite straight; there is a curious slashing at the junction of the common skin and the membrane,—the skin covered with hair descending to the nail, whilst the membrane runs up between the toes more than an inch. The coat or robe is composed of hair and fur; the former is very soft, smooth, and compact, of a brownish black colour towards the root, and a greyish white towards the tip; it extends considerably beyond the fur, and gives the general colouring to the hide: the fur itself is of a uniform brownish white colour above, and of a somewhat deep brown beneath, and is quite wanting on the extremities. The colour of the body is of a uniform whitish grey above, passing gradually underneath into a reddish white colour, which is deepest in the abdominal region. The upper portion of the extremities is covered above with a very short brownish black hair, which near the body passes into the colour of the back. The under portion of both extremities—to the extent of $\frac{9}{2}$ of the anterior, and nearly the whole of the posterior-are naked, being quite destitute both of hair and fur. The whiskers are brownish black, five rows being present. In one of the specimens there is a dark marking under the eyes. We shall here subjoin the principal measurements of these Edinburgh specimens.

	ft.	inch, lin,
Length from the snout to the tip of the tail	3	3 0
of the tail	0	1 0
—— of the ear	0	1 0
from snout to anterior edge of the base of the paw	1	5 6
from posterior edge of paw to the root of the tail	1	5 6
of fore paw from base to tip	0	11 0
of its membranous portion		4 0
Greatest breadth of fore paw at base	0	4 0
its tip	0	1 8
Length of posterior extremity from base to tip	0	7 0
of its membranous portion	0	2 0
Breadth across the back, from the base of one paw to that of the other	1	0 0
Distance from tip of snout to the ear	0	5 6
The angle of the mouth is in the perpendicular of the eye.		

To this detailed account of the specimens we must add an important character which is supplied by Captain Weddell. "Nothing," he remarks, "regarding the fur seal is more astonishing than the disproportion in the size of the male and female. A large grown male from the tip of the nose to the extremity of the tail is 6 feet 9 inches, while the female is not more than $3\frac{1}{2}$ feet. This class of the males however is not the most numerous, but being physically the most powerful, they keep in their possession all the females, to the exclusion of the younger branches; hence at the time of parturition the males attending the females may be computed to be as one to twenty, which shows this to be perhaps the most polygamous of large animals."

Habits.—The few particulars which are casually noted by this original observer, are so strongly illustrative of the peculiar habits of this seal, and of many others, that it would be improper here to omit them. "These fur seals," he states, " are in their nature completely gregarious; but they flock together and assemble on the coast at different periods, and in distinct classes. The males of the largest size go on shore about the middle of November, to wait the arrival of the females, who of necessity must soon follow, for the purpose of bringing forth their young. These in the early part of December begin to land, and they are no sooner out of the water than they are taken possession of by the males, who have many serious battles with each other in procuring their respective seraglios; and by a peculiar instinct they carefully protect the females under their charge during the whole period of gestation. By the end of December all the female seals have accomplished the purpose of their landing. The time of gestation may be considered nearly twelve months, and they seldom have more than one at a time, which they suckle and rear apparently with great affection. By the middle of February, the young are able to take the water, and after being taught to swim by the mother, they are abandoned on the shore, where they remain till their coats of fur and hair are completed. During the latter end of February, what are called the dog seals go ashore; these are the young seals of the two preceding years, and such males as, from their want of age and

strength, are not allowed to attend the pregnant females. These young seals come on shore for the purpose of renewing their annual coats; which being done, by the end of April they take the water, and scarcely any are seen on shore again till the end of June, when some young seals come up and go off alternately. They continue to do this for six or seven weeks, and then retire to the water. The large male seals take up their places on shore, as has been before described, which completes the intercourse all classes have with the shore during the whole year. The young are at first black; in a few weeks they become grey, and soon after obtain their coat of hair and fur. Their sense of smell and hearing are acute; and in instinct they are little inferior to the dog; that is, I judge their sagacity in the water much exceeds that which they exhibit on shore; for though they are capable of remaining a certain time on land, their natural element is the water. I have estimated the female to be in general at its full growth within four years; but possibly the male is much longer, and some which I have contrasted with others of the same size, could not from their very old appearance be less than thirty years.

"When these South Shetland seals were first visited they had no apprehension of danger from meeting men; in fact they would lie still while their neighbours were killed and skinned; but latterly they had acquired the habit of preparing for danger by placing themselves on rocks, from which they could in a moment precipitate themselves into the water. The agility of the creature is much greater than from its appearance an observer would anticipate. I have seen them indeed often escape from men running fast in pursuit to kill them. The absurd story that seals in general defend themselves by throwing stones at their pursuers with their tails may be explained in this way—that when an animal is chased on a stony beach, their mode of propelling themselves is by drawing their hind flippers forwards, thereby shortening the body and projecting themselves by the tail, which when relieved by the effort of the fore flippers, throws up a quantity of stones to the distance of some yards."

And now to revert to the identification of the fur seal, we

regret that we are not aware of the existence of a cranium of this species in any of our museums, and therefore we cannot supply its specific characters, or compare them with those of any of the established genera. After the foregoing details however we need scarcely remark that it is a very different animal from the ursine seal, with which M. Lesson, almost the only author, so far as we have perceived, who touches upon this point, has identified it. This intelligent naturalist, who himself spent a considerable time in the antarctic regions, in the able article on the *Phoca* in the Dictionnaire Classique des Sciences Naturelles,' expressly says, "L'Otarie de Forster est la Phoque à fourriers des pêcheurs Européens *;" the Otary of Forster, better known under the name of the sea bear or ursine seal. But we have no positive evidence that the ursine seal is a fur seal in contradistinction to a hair seal, in which latter character it is unquestionably prized. The difference of these two species is, we apprehend, too plain to require much elucidation. Concluding with the illustrious Peron, that the ursine seal of the southern hemisphere is different from that of the northern, which is known as Steller's sea bear, still the descriptions supplied of the southern variety are too specific to leave any doubt on the subject. Dampier + states that at Juan Fernandez the sea bear was found of the size of an ordinary calf: and Forster remarks that those found in New Year's Island, Staten-land, equal the size assigned by Steller to his bear, that is, to that of its terrestrial namesake, of a large size. But in addition to this we have again the valuable testimony of Mr. Weddell. After what has been stated, no one can doubt of his acquaintance with the fur seal. He was also familiar with the ursine seal, both as encountered in its haunts and as described by naturalists; and yet when speaking of the ursine seal (so denominated by him) he never once hints that its fur has any peculiar value, but on the contrary excludes it with the others, and ranks it merely as a hair seal. Were any further corroboration on this point required it may be found in the testimony of our furriers. We have inquired of a considerable number of them, and especially of M, L'Ry,

^{*} Dict. Class. t. xiii. 422.

who for years was superintendent of one of the largest fur concerns in the metropolis of the empire, and was in the habit of overhauling great cargoes of south seal skins; and the only response we have obtained is, that there is but one seal which has yielded this particular fur. On visiting M.L'Ry he speedily informed us that he happened to have lying by him a skin of the true fur seal, which he immediately produced, and it appeared manifestly to be identical with the two given by Capt. Weddell to the College Museum. The same gentleman informed us that the fur of this valuable animal is prepared by a process quite different from that employed for the others, the hair being entirely removed, which is done by heating the skin, and then carding it in a peculiar manner with a large wooden knife prepared for the purpose: the fur then appears in all its perfection.

But though we consider it was a decided mistake in that naturalist, who of all others might have been supposed best acquainted with the subject, to confound this fur seal with the ursine, yet, as we before hinted, we think it evident there has been obscure notices of this seal in former and remote periods of the history of the science; and to these it will be now interesting shortly to advert.

It will be remembered by many that in most of our systematic works there is appended to the supposed ascertained species of this interesting group, a list of obscure and doubtful ones which have long maintained their place, without almost anything being known regarding them. In this position we find the Falklandica and longicollis, both of which we are disposed to consider as the same with the fur seal, and consequently with each other. All our modern systematists, French and English, have ranked the Falklandica as an otary; and considering its true value, it is not a little curious that its character and natural history have been so much obscured. This seal seems to have been introduced to notice by Pennant. "There has of late," says he, "been introduced into the Museum of the Royal Society, from the Falkland Islands, another seal, the length of which is four feet; its hair is short, cinereous, tipped with dirty white; the nose is short, beset with strong black bristles; the external auricles are short, narrow and pointed; the upper teeth are sulcated transversely; the

lower in an opposite direction; on each side of the canine there is a lesser or secondary one; the grinders are conoid, with a small process on each side near the base: there are no claws on the fore feet, but underneath the skin there are evident marks of the bones of five toes: the skin extends far bevond their ends. On the toes of the hind legs are four long and straight claws, but the skin stretches far beyond, which gives them a very pinniform look *." Shaw's account is a literal copy of the above; and this appears to have been all the information given to the public by naturalists concerning this seal. We are not therefore to wonder at Baron Cuvier's exclamation, "Que faire de cette Otarie (O. Falklandica) cendrée, tachetée de blanc sale? Sont ce des âges, des varietés de l'ours de mer; sont ce des espèces? On ne pourra le savoir que lorsque des individus bien entiers seront décrits en détail à l'extérieur, et au moins pour les parties osseuses de la têtet." Other French naturalists take precisely the same view of this animal which Baron Cuvier did in 1823. Desmarest, three years before, in his 'Mammalogie,' supplied the characters furnished by Pennant without an additional remark. M. Fr. Cuvier in the year 1826‡, and M. Lesson in 1827 &, have merely introduced it into a list of little more than bare names, as a species altogether obscure and unascertained; and the last-named distinguished author, in one of the last and best treatises on the seals, in 1828, says of it, "Espèce peu connue et trop incomplètement décrite qu'on puisse l'isoler, ou la rapporter à telle ou telle espèce ||."

Though so much difficulty was thus experienced by these able naturalists, yet we find that the personal observation of Capt. Weddell enabled him at once to identify the Falklandica with his fur seal. In relation to this point he unhesitatingly says, "The fur seal is what is called in zoology the Phoca Falklandica, the Falkland Island seal, a species which has been distinguished by naturalists by the peculiarity of its shape." Pennant indeed had stated that it came from the

^{*} History of Quadrupeds, 3rd edit. 4to, vol. ii. p. 275.

[†] Oss. Fossils, tom. v. P. II. p. 214. † Dict. des Scien. Nat. tom. xxxix. § Manuel de Mammalog. in loc. cit.

^{||} Dict. Class. des Sc. Nat. tom. xiii.

Falkland Islands; but then these dreary regions are, or we must rather say were, rife with many species of seals, and the fur seal has long been exterminated from them; besides he gives no hint of its possessing a valuable fur. The otary which Lesson and Garnat captured at a later period among the Falkland Islands,—the Otaria Molossina of the 'Zoologie de la Coquille,' is quite a different animal from this Falklandica. The French zoologists, who have laboured most in this department, from not being interested in the trade, seem never to have received any specimens or drawings of this seal; hence these naturalists with all their acumen could have nothing but a partial and imperfect conception of this important species. But it is quite a different matter with a man living in the midst of these animals; to him a hint or two is sufficient to certify its characters and establish its identity. So we believe it was with Weddell; and so will it be with any one who acquires clear and specific notions of the form and appearance of this species, and its most nearly allied congeners.

Still greater obscurity has prevailed, and with less apology, regarding the longicollis. This seal is enumerated as a species distinct from the preceding by Pennant and Shaw; and has been arranged by Messrs. Desmarest, Fr. Cuvier, and Lesson among the earless seals or true Phocæ; whilst Baron Cuvier with his wonted acumen refers it rather to the Otaria; whilst at the same time he exclaims, "Que faire de cette mauvaise peau du Musée de la Societé Royal, gravée par Parsons, nommée par Pennant Phoca longicollis*?" In turning to what Parsons denominates Dr. Grew's "excellent book of Rarities" of the Royal Society, which was published in the year 1694, we find that at that date the Museum contained three specimens of seals. Two of these he refers to the species vitulina, or common seal; and of the third he remarks, "I find him nowhere distinctly mentioned; he is much slenderer than any of the former; but that wherein he principally differs is the length of his neck; for from his nose to his fore feet, and from thence to his tail, are the same measure: as also, that instead of fore feet he has rather fins, not having any claws thereon, as have the other kinds +." Dr. Parsons, who entertained the Royal Society with

^{*} Loc. cit. + Grew's Catalogue of Rarities, &c. Lond. 1694, p. 95.

a paper on seals in 1750, supplies the next notice concerning this animal; and to Dr. Grew's description he merely adds, "that the head and neck of this species are exactly like those of the otter*." But the most satisfactory witness as to the existence of this animal, if not to the identical specimen, is the illustrious coadjutor of Buffon, in the Paris Museum, and in the publication of the 'Histoire Naturelle.' In their first united treatise, published we believe in the year 1767, we find the learned Daubenton, when treating of quite a different seal, remarking, "I have seen the dried specimens of two individuals of the same kind of seal. The largest appeared fullgrown, and was not 21 (English) feet long, from the end of the snout to the origin of the tail; the neck was longer and the body shorter than the common seal; the fore feet were near the middle part of the whole body, and it had a small external ear. The hair was longer and softer than that of the other seals, being an inch long; it was glossy, waving and curled in some places. It was black on the upper part of the head, neck, and body, and dark brown underneath, and on the feet. On separating the hairs, it appeared they were of a pale fawn colour at the root. The skin of the sole of the foot was naked, and of a brown colour, with very marked rugæ or longitudinal lines; the nails were very small, and the skin which united the toes extended below the nails, and was prolonged much beyond them, and terminated in a divided membrane, each projecting part of which was of a size proportioned to the toe to which it belonged †." This is the animal which is figured in the 47th vol. of the Phil. Trans. From this it will be seen that Dr. Shaw, especially after the time of Daubenton, had no authority, and on the other hand acted alike gratuitously and erroneously in designating this the earless seal of Pennant; by which statement he misled the eminent French naturalists we have named, and was the means of introducing that erroneous classification which has so long prevailed.

Nothing is added concerning the habitat and habits of this seal, or of any economic use to which it was applied; which is the less to be wondered at, as probably the value of the fur

^{*} Phil. Trans. vol. xlvii. p. 112. † Hist. Nat. 4to edit. Tom. xiii. p. 414.

seal was not then known. But influenced by only a becoming deference to these original and respectable, though not quite modern authorities, we think it may be held that these characters thus assigned to their specimens are not equivocal. Daubenton states that he had seen two specimens of the same species, and the other witnesses had examined one individual. The animal they describe differs remarkably from all the previously described seals, and from nearly all that have been subsequently examined; more especially in having the fore paws situated midway between the snout and the tail; it is also an otary, according to the two last witnesses, and moreover it possesses the very singular flippers, apparently peculiar to this tribe of animals. Hence, and from other considerations on which it is unnecessary to enlarge, we conclude that this longicollis, like the Falklandica, may without hesitation be considered identical with the fur seal of commerce.

Although upon the grounds we have stated we think little doubt can remain regarding the animal which forms the true fur seal of commerce, yet we are persuaded there is still room for fresh and additional inquiry.

We conclude our observations for the present with the following quotation from Lesson. "The Americans," he says, "regard many seals as fur seals which are unknown to naturalists, and wholly distinct from each other. Thus, they state that the fur seal of Patagonia has a pump behind its head; that that of California is of very large dimensions; that the upland seal, or that which retreats far from the shore, is small and exclusively inhabits the Macquarrie islands and Pennantipodes; and finally that the fur seal of the south of New Zealand has other and distinctive characters *." Of the seals here alluded to, we have no evidence whether they are to be regarded as fur seals in the more limited sense insisted upon in these pages, and whose peculiar mode of preparation is difficult, and has sometimes been lost sight of; or are fur skins in the more popular acceptation of the term as bear and foxes skins are usually denominated furs. The truth however may be, that many seals would produce in high perfection that article which is now so much desiderated, and yields so rich a return.

^{*} Dict. Class. des Scien. Nat. tom. xiii. p. 411.

fact, we have seen the skin of another seal, from the South Sea, whose species was unknown, which was dressed as a fur skin, and formed a beautiful manufacture; and the sea otter skin, which is second in value only to the sable, is usually prepared as a *fur* and not a *hair* skin. These hints at all events should be sufficient to excite the attention of the trader and the naturalist, as a matter which is both of commercial and of scientific interest.

XI.—On Ononis antiquorum of Linnæus. By Edward Forster, F.R.S., V.P.L.S.

Being rather surprised by a remark made to me by an excellent botanist, and assented to by another, that "Mr. Bentham is mistaken in referring in the Supplement to English Botany, our common rest-harrow to Ononis antiquorum of Linnæus," I was induced to examine the Linnæan specimen, when, as I expected, I immediately saw that Bentham was decidedly accurate, the specimen agreeing in every respect with Ononis spinosa of Hudson, the plant which at this time so beautifully adorns our heaths. On turning to Sir James Edward Smith's own Herbarium, I found a foreign specimen of the plant in question called O. antiquorum on the authority of Mr. West, and it is plain that Smith so considered it, by his remark in English Botany, and afterwards in his English Flora, though conceiving it not distinct from O. arvensis, he has preferred that name. It is true that the Linnæan specimen is badly dried, but I happen to have one as ill done which corresponds exactly. I have thought it right to say thus much in justice to my friend Bentham as well as for the information of the public.

From looking into Reichenbach's 'Flora Germanica Excursoria,' it has appeared to me probable, that the doubt has arisen from trusting implicitly to that author, who is acquainted with O. antiquorum by seeing a specimen gathered by Tournefort, yet asserts that O. antiquorum Auctorum is not that plant of Linnæus, but O. arvensis β . spinosa, Smith, which he keeps distinct from O. antiquorum of Linnæus: in doing so he is in error, for I must maintain that our plant is